



Elektro-Automatik



PS 9000 T

Advanced Programmable DC Power Supplies | 320 W - 1500 W

High Efficiency: Achieves up to 92% efficiency for energy-saving operation.

Flexible Auto-Ranging Output: Adapts to a wide range of voltage and current requirements, providing versatility across applications.

Comprehensive Protection Mechanisms: Includes OVP, OCP, OPP, and OT to safeguard both the power supply and connected devices.

Intuitive Touch Panel Interface: Features a color TFT display for easy configuration and monitoring.

Wide AC Input Range with Active PFC: Supports global use with input voltages from 90 to 264 V, ensuring compatibility with various power standards.

EA-PS 9000 T 320 W - 1500 W

Programmable desktop DC Power
Supply



General

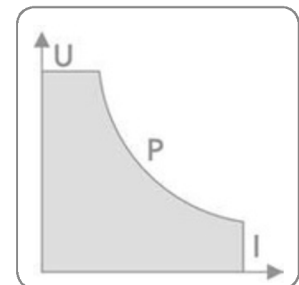
The EA-PS 9000 T Series combines advanced microprocessor-controlled technology with a user-friendly design, making it the ideal solution for laboratory and industrial power supply needs. Featuring intuitive handling, extensive supervision features, and effortless configuration of output parameters, these power supplies reduce the need for additional supervision hardware and software. The touch control panel, complemented by ergonomic knobs and buttons, ensures precise control with minimal effort, enhancing the user experience and operational efficiency.

AC Supply

Engineered for global compatibility, the EA-PS 9000 T Series integrates Active Power Factor Correction (PFC) for seamless worldwide operation across a wide input voltage range of 90 to 264 VAC. High-powered models maintain robust performance even under reduced input voltages, ensuring dependable output power and efficiency across all environments.

Auto-Ranging Power Stage

Each unit features a dynamic auto-ranging power stage, enabling higher output voltages at lower currents and higher output currents at lower voltages. This flexible design maximizes utility, allowing a single device to cover a wide range of applications. Users benefit from optimal power delivery tailored to their specific requirements, minimizing the need for multiple power supplies.



DC Output

Offering a versatile range of output voltages from 0–40 V up to 0–500 V and currents from 0–4 A to 0–60 A, the EA-PS 9000 T Series provides precise, continuous adjustment of voltage, current, and power. Whether controlled locally via the intuitive interface or remotely through analog or digital inputs, these power supplies ensure consistent, reliable performance for any application.

Discharge Circuit

Models with output voltages of 200 V or higher include an integrated discharge circuit, ensuring safe voltage reduction to below 60 V DC after power-off. This feature minimizes risks during maintenance or idle periods, safeguarding both users and equipment from potential hazards.

Protective Features

Comprehensive protective measures are built into the EA-PS 9000 T Series, including overvoltage protection (OVP), overcurrent protection (OCP), overpower protection (OPP), and overtemperature protection (OTP). These safeguards automatically shut down the unit and issue alerts in the event of anomalies, ensuring system safety and preventing damage to connected devices.

Remote Sensing

Integrated remote sensing capabilities automatically compensate for voltage drops across load cables, ensuring precise voltage delivery directly at the load. This feature enhances accuracy and reliability, making the EA-PS 9000 T Series perfect for applications where precision is critical.

Optional Analog Interface

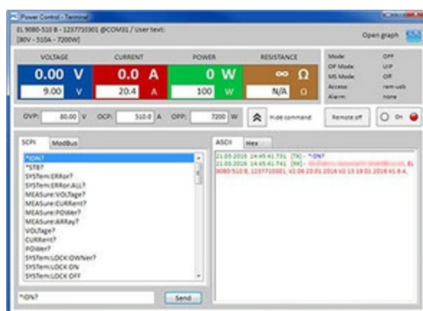
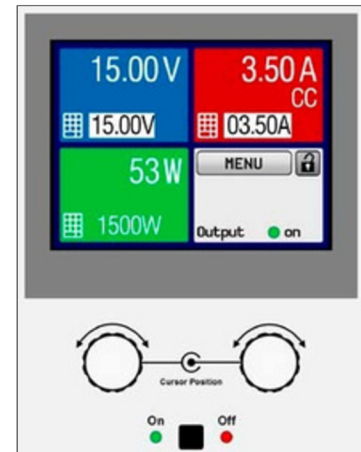
For added versatility, a galvanically isolated analog interface can be integrated, offering control of voltage, current, and power across a range of 0–10 V or 0–5 V. This modular interface expands monitoring and control options, providing flexibility to adapt the power supply to diverse operational needs.

Display and Control Panel

The color TFT touch display provides real-time visualization of all critical parameters, including set and actual values for voltage, current, and power. Its intuitive design allows users to adjust settings effortlessly, with additional lockout functions to prevent unintended changes. Multilingual support ensures accessibility for a global user base.

Presetting of Output Values

Efficiently configure output values without impacting current conditions using the presetting feature. Users can store and switch between multiple predefined settings with ease, enabling quick adjustments for varying operational requirements. The clear, user-friendly interface ensures precise setup and reliable performance.



Control Software

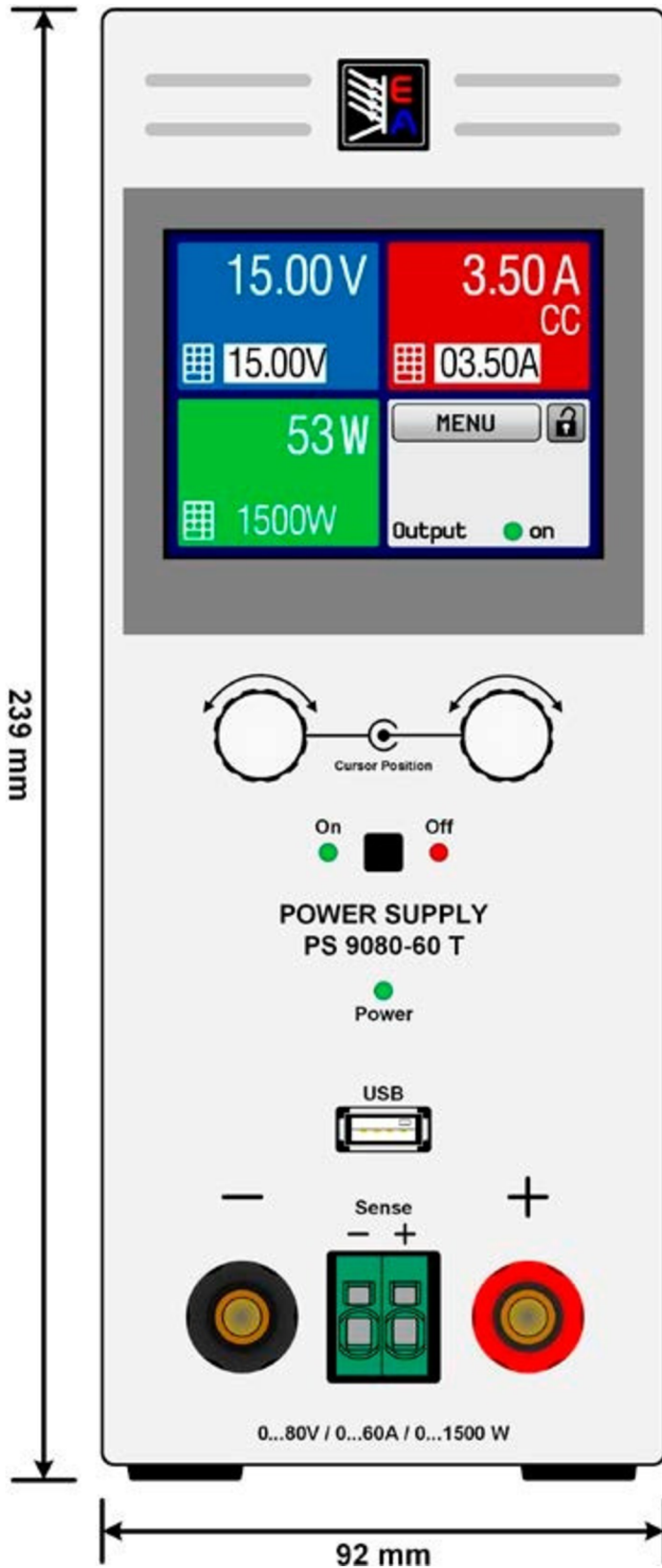
Included control software for Windows PCs provides powerful remote management capabilities, supporting multiple units simultaneously. With features such as SCPI and ModBus RTU command compatibility, sequencing functionality, and firmware updates, the software streamlines device control and integration. The optional Multi-Control app further enhances scalability, enabling the management of up to 20 devices in a single window.

Options

Expand the EA-PS 9000 T Series' capabilities with optional retrofitable modules, including USB, Ethernet, and analog interfaces. These modular enhancements provide additional connectivity and functionality, adapting the power supply to a wide range of applications.



Product Views



Technical Data

AC Supply

- Voltage: 90...264 V, 1ph+N
- Frequency: 45...65 Hz
- Power factor: >0.99
- Derating: Only models with 1500 W: <150 V AC to P rated 1000 W

DC Voltage

- Accuracy: <0.1% of rated value
- Load regulation $\pm 100\%$ ΔI UC: <0.05% of rated value
- Line regulation $\pm 10\%$ ΔU AC: <0.02% of rated value
- Regulation 10–100% load: <2 ms
- Rise time 10–90%: Max. 30 ms
- Overvoltage: Adjustable, 0...110% U nom

DC Current

- Accuracy: <0.2% of rated value
- Load regulation $\pm 100\%$ ΔI UC: <0.15% of rated value
- Line regulation $\pm 10\%$ ΔU AC: <0.05% of rated value

DC Power

- Accuracy: <1% of rated value

Overvoltage category: 2

Protection: OT, OVP, OCP, OPP, PF

Insulation

- Input to enclosure: 2500 V DC
- Input to output: 2500 V DC
- Output to enclosure: Negative: max. 400 V DC, positive: max. 400 V DC + output voltage
- Degree of pollution: 2
- Protection class: 1

Analog interface (optional)

- 15 pole D-Sub, galvanically isolated
- Signal range: 0...5 V or 0...10 V (switchable)
- Inputs: U, I, P, remote control on-off, DC output on-off
- Outputs: U, I, overvoltage, alarms, reference voltage
- Accuracy U / I / P: 0...10 V: <0.2%, 0...5 V: <0.4%

Parallel operation: Possible

Standards: EN 60950, EN 61326, EN 61010, EN 55022 Class B

Cooling: Temperature-controlled fan

Operation temperature: 0...50 °C

Storage temperature: -20...70 °C

Relative humidity: <80%, non-condensing

Altitude: <2000 m (1,242 mi)

Mechanics

- Weight: 320 W–640 W: ≈ 7 kg (15.4 lb)
- 1000 W–1500 W: ≈ 8 kg (17.6 lb)
- Dimensions (W x H x D):
- 320 W–640 W: 92 x 239 x 352 mm (3.6" x 9.4" x 13.8")
- 1000 W–1500 W: 92 x 239 x 412 mm (3.6" x 9.4" x 16.2")

Technical Specification by Model

| Model | Voltage | Current | Power | Efficiency | Ripple U α | Ripple I | Programming α (U (typ.)) | Programming α (I (typ.)) | Programming α (P (typ.)) |
|-------------|-----------|----------|--------|-------------|--------------------|------------|---------------------------------|---------------------------------|---------------------------------|
| PS 9040-20T | 0...40 V | 0...20 A | 320 W | $\leq 88\%$ | 20 mV / 2 mV rms | 1 mA rms | 1.5 mV | 0.8 mA | 0.012 W |
| PS 9080-10T | 0...80 V | 0...10 A | 320 W | $\leq 89\%$ | 20 mV / 2 mV rms | 1 mA rms | 3.1 mV | 0.4 mA | 0.012 W |
| PS 9200-04T | 0...200 V | 0...4 A | 320 W | $\leq 89\%$ | 20 mV / 2 mV rms | 1 mA rms | 3.1 mV | 0.4 mA | 0.012 W |
| PS 9040-40T | 0...40 V | 0...40 A | 640 W | $\leq 88\%$ | 20 mV / 2 mV rms | 1 mA rms | 1.5 mV | 0.8 mA | 0.012 W |
| PS 9080-20T | 0...80 V | 0...20 A | 640 W | $\leq 91\%$ | 50 mV / 6 mV rms | 5 mA rms | 3.1 mV | 0.4 mA | 0.038 W |
| PS 9200-10T | 0...200 V | 0...10 A | 640 W | $\leq 91\%$ | 50 mV / 6 mV rms | 5 mA rms | 3.1 mV | 0.4 mA | 0.038 W |
| PS 9040-60T | 0...40 V | 0...60 A | 1000 W | $\leq 92\%$ | 25 mV / 4 mV rms | 7.5 mA rms | 1.5 mV | 1.0 mA | 0.057 W |
| PS 9080-40T | 0...80 V | 0...40 A | 1000 W | $\leq 92\%$ | 25 mV / 4 mV rms | 4 mA rms | 1.5 mV | 0.4 mA | 0.057 W |
| PS 9200-15T | 0...200 V | 0...15 A | 1000 W | $\leq 93\%$ | 25 mV / 4 mV rms | 1.5 mA rms | 7.6 mV | 1.5 mA | 0.057 W |
| PS 9500-03T | 0...500 V | 0...3 A | 1500 W | $\leq 93\%$ | 62 mV / 13 mV rms | 0.6 mA rms | 19.1 mV | 2.3 mA | 0.057 W |
| PS 9200-25T | 0...200 V | 0...25 A | 1500 W | $\leq 93\%$ | 155 mV / 33 mV rms | 18 mA rms | 7.6 mV | 1.5 mA | 0.057 W |
| PS 9500-10T | 0...500 V | 0...10 A | 1500 W | $\leq 93\%$ | 62 mV / 13 mV rms | 0.6 mA rms | 19.1 mV | 2.3 mA | 0.057 W |

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